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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/675,622	09/29/2000	Arvind Kumar	42390P9709	9572

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EXAMINER

PRIETO, BEATRIZ

ART UNIT	PAPER NUMBER
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2142

DATE MAILED: 08/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/675,622

Applicant(s)

KUMAR, ARVIND

Examiner

Prieto Beatriz

Art Unit

2142

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 May 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6,8 and 9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6,8 and 9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 September 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. This communication is in response to Amendment filed under 37 CFR 1.116, claims 1-2 and 5-6 have been amended, claims 7, 10-25 have been canceled, hence, claims 1-6, and 8-9 have been examined and remain pending.

2. There is a strong presumption that an adequate written description of the claimed invention is present in the specification as filed, Wertheim, 541 F.2d at 262, 191 USPQ at 96; however, with respect to newly added or amended claims, applicant should show support in the original disclosure for the new or amended claims. See MPEP § 714.02, and 2163.06. (“Applicant should specifically point out the support for any amendments made to the disclosure.”) (see MPEP § 2163 B (II)).

Broadest reasonable interpretation to the claimed term will be applied (see MPEP §2111/2106). In this case, the claimed term “a plurality of third-party Internet search engines” will be interpreted a plurality/two or more engines.

3. Quotation of the appropriate paragraphs of 35 USC 103 that form the basis for the rejections under this section made in this Office action may be found in previous office action.

4. Claims 1-6, 8-9, 15-17 and 22-23 are rejected under 35 USC 103(a) as being unpatentable over GAO (US 6,581,094) in view of Using Network Discovery Architecture (Chapter 8), Microsoft Corp., 1999, IDS file 3/19/2001, (referred to as Microsoft hereafter) and further exemplified by Seshadri et. al. (US 6,615,201).

Regarding claim 1, a user at a console creating a query, wherein the console includes a device managing a network device (see GAO: col 10/lines 1-21, col 10/lines 23-40, col 14/lines 1-7, 21-23, 27-32);

sending the query to a search engine to facilitating searching information about the network device (see GAO col 3/lines 41-47, col 14/lines 7-15, e.g. HTTP request for the

requested file specified by an URL as shown on table I, lines 1-38, or table II, lines 1-23, Fig. 3, col 11/lines 25-36);

receiving a ("discovery information") query (see GAO: col 3/lines 42-47, col 5/lines 1-13) on a network device (90) storing files containing information (col 4/lines 2-3, 10-15, 31-36, col 5/lines 8-9) about the network device (Gao: col 4/lines 45-67) sent via a search engine XML enable module (Gao: col 5/lines 1-13, browser sends query to search engine 80 of Fig. 1 see col 14/lines 1-15);

receiving the result of standard Internet search including searchable UDD files matching said query (see GAO: col 4/lines 45-67, col 1/lines 60-65, col 5/lines 1-13) and wherein

said search engine includes a device (66) to input search parameters (col 3/lines 12-15) to be searched used standard Internet searching techniques (col 3/lines 42-47) using a web browser to identify the devices (col 4/lines 63-65) one of the following parameters; type of network device, status of network device or capability of network device (col 11/lines 25-36); however, Gao does not teach using discovered IP address for network devices to generate a network topology map.

Microsoft discloses using discovered IP addresses from a discovery search, e.g. topology discovery type, to gather information about the system resources on the network including client computers, servers, and network devices such as routers. Received discovery information comprising discovery data records (DDR's) for network devices, how they are connected, and also contain information about each identified resource. The collect IP addresses are used to find other network devices that are connected to a network device, e.g. a router from which the IP addresses where obtained in this way obtaining information of all the devices connected thereto. This information is used by Network Trace to build diagrams of site system, e.g. Figure 8.1 illustrates topology (map) discovery (see p. 2-3).

It would have been obvious to one of ordinary skill in the art at the time the invention was made given the suggestion of Gao for retrieving the files for each network device each containing information of the network device for displaying on the output device of the client computer, the files written in XML enabling a single document to display a variety of digital devices, to teachings of Microsoft for generating maps of the collected network discovery information would be obvious. One would be motivated to enable to make different types of queries such as discovery type to determine the specific information to be gathered because in

doing so network devices pertaining to a specific subnet may be discovered and displayed in a map form indicating the devices connected thereto and can also specify other subnets, as disclosed by Microsoft. Although the above mentioned prior art discloses the sending the discovery information query to a search engine to facilitate searching of discovery information relevant to a device(s) and receiving in response information from the search engine, it does not use a two or more engines.

Seshadri teachings in the invention's field of endeavor, discloses the use of distributed query (search) engines (column 4, lines 31-47) for obtaining information relevant to a device(s) and receiving in response the information requested from the engines (column 4, lines 26-47). Seshadri discloses that the objective for using multiple search engines is to reduce network management traffic (column 2, lines 1-10, column 5, lines 19-21), decentralize management nodes that could become a bottleneck as the network complexity increases with auxiliary management nodes (column 1, lines 50-55), reducing network traffic as well and computing strength of the search engine (column 3, lines 62-65).

It would have been obvious to one of ordinary skill in the art at the time the invention was made given the teaching of Gao for sending the discovery information query to a search engine to facilitate searching of discovery information relevant to a device(s) and receiving in response information from the search engine and generating maps of the collected network discovery information by Microsoft, the teachings of Seshadri for sending the discovery information query to two search engines to facilitate searching of discovery information relevant to a device(s) and combining the received responses from the search engines to yield the search result, as taught by Seshadri would be readily apparent. Motivation to utilize multiple search engines because in doing so network management traffic is reduced, single search engine reduces the network fault tolerant capabilities, and/or decentralize a single search engine that could become a bottleneck as the network complexity increases is eliminated and configuring the search engine with optimizer may increase the computing strength of the search engines, as suggested by Seshadri.

Regarding claim 2, searching via a search engine XML enabled (search engine which is XML enabled see GAO: col 5/lines 8-9, or XML standard search technology see col 4/lines 2-3, 45-67); searching (query) discovery information (browser 30/50 of Fig. 1) to be sent to the XML based search engine (Gao: col 4/lines 45-64 and col 14/lines 1-32); search engine includes XML files each having information about each respective network device (Gao: col 3/lines 24-47, col 9/lines 9-13).

Regarding claim 3, manipulating the retrieved discovery information (Gao: update or upgrade retrieve UDD file data see col 14/lines 25-32, selected UDD file for retrieval and respective processing for rendering display, i.e. "manipulating" see col 3/lines 48-61, searchable UDD file via a web browser 50 see col 4/lines 45-64).

Regarding claim 4, displaying the manipulated discovery information (Gao: deliver for display selected UDD file "information" see col 3/lines 48-54, XML based document displayable on any device see col 4/lines 18-22, display of retrieved UDD file see col 11/lines 25-36 and Fig. 3).

Regarding claim 5, this claim is the machine-readable medium that provides instructions, which when executed by a machine, cause said machine to perform operations of the method claim discussed on claim 1, same rationale of rejection is applicable.

Regarding claim 6, this claim is the machine-readable medium that provides instructions, which when executed by a machine, cause said machine to perform operations of the method claim discussed on claim 2, same rationale of rejection is applicable.

Regarding claims 8-9, this claim is the machine-readable medium that provides executable instructions to perform the method associated with the searching functions discussed on the method claims 2-4, therefore same rationale of rejection is applicable.

Response to argument

5. Regarding claims 1, 2, 5 and 6 it is argued that the applied prior art does not teach claim limitation as added, namely, a plurality of search engines.

In response to the above-mentioned argument, the invention's disclosure has been reviewed for support to the added limitation, namely, "a plurality of third-party Internet search engines". In accordance with § 1.75 claim(s) (d) (1) The claim or claims must conform to the invention as set forth in the remainder of the specification and the terms and phrases used in the claims must find clear support or antecedent basis in the description so that the meaning of the terms in the claims may be ascertainable by reference to the description. (See § 1.58(a)). Antecedent basis for the claimed term "third-party Internet search engines" seems unclear, particularly, as to where are "third-party Internet search engines" described.

Broadest reasonable interpretation to the claimed term will be applied (see MPEP §2111/2106). In this case, the claimed term "a plurality of third-party Internet search engines" will be interpreted a plurality/two or more engines.

Seshadri teachings in the invention's field of endeavor, discloses the use of distributed query (search) engines (column 4, lines 31-47) for obtaining information relevant to a device(s) and receiving in response the information requested from the engines (column 4, lines 26-47). Seshadri discloses that the objective for using multiple search engines is to reduce network management traffic (column 2, lines 1-10, column 5, lines 19-21), decentralize management nodes that could become a bottleneck as the network complexity increases with auxiliary management nodes (column 1, lines 50-55), reducing network traffic as well and computing strength of the search engine (column 3, lines 62-65).

Given the teaches of Gao for prior art discloses the sending the discovery information query to a search engine to facilitate searching of discovery information relevant to a device(s) and receiving in response information from the search engine, particularly, where the teachings of Gao envision the digital device's installation, discovery, connection, use, and management in the Internet environment, the amendment to the claim to include a "plurality of search engines" would have been obvious to one of ordinary skill in the art. It would be readily apparent to one of ordinary skill in the computer network art, that multiple components in a distributed networked environment reduce the susceptibility of the system to failure of any one component/device and

thus make it more reliable; and reduces bandwidth, i.e., the rate at which the information is distributed, because the information is transmitted via more than one nondedicated path.

6. Regarding claims 1, 2, 5 and 6 it is argued that the applied prior art references, namely, Gao and Microsoft, provides no motivation to combine the applied references.

In response to the above-mentioned argument, applicant's interpretation of the applied references have been reviewed. The applied motivation, namely, "It would have been obvious to one of ordinary skill in the art at the time the invention was made given the suggestion of Gao for retrieving the files for each network device each containing information of the network device for displaying on the output device of the client computer, the files written in XML enabling a single document to display a variety of digital devices, to teachings of Microsoft for generating maps of the collected network discovery information would be obvious. One would be motivated to enable to make different types of queries such as discovery type to determine the specific information to be gathered because in doing so network devices pertaining to a specific subnet may be discovered and displayed in a map form indicating the devices connected thereto and can also specify other subnets, as disclosed by Microsoft", may be at least found in Microsoft, see discovery type options (page 2); map connectivity (page 3).

7. Applicant's argument filed in the above-mentioned amendment have been fully considered but not found persuasive.

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Prieto, B. whose telephone number is (571) 272-3902. The Examiner can normally be reached on Monday-Friday from 6:00 to 3:30 p.m. If attempts to reach the examiner by telephone are unsuccessful, the Examiner's Supervisor, Andrew T. Caldwell can be reached at (571) 272-3868. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3800/4700.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system, status information for published application may be obtained from either Private or Public PAIR, for unpublished application Private PAIR only (see <http://pair-direct.uspto.gov> or the Electronic Business Center at 866-217-9197 (toll-free).

Any response to this action should be mailed to:
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TC 2100
August 8, 2006


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